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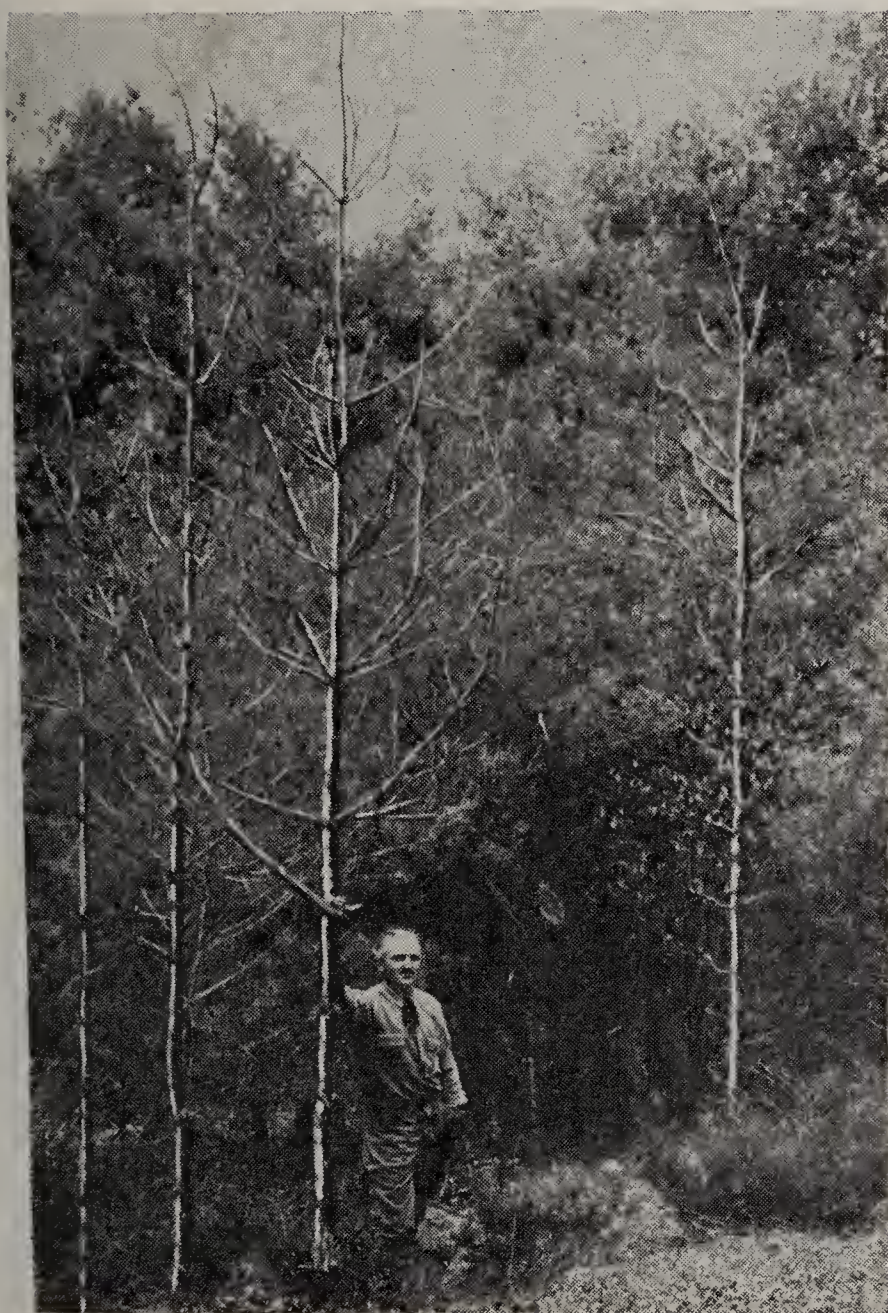


BOOK NUMBER

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The White Pine Blister Rust Disease



Young white pine trees killed by the
blister rust disease.

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Revised January 1947

Questions and Answers

Q. What is *white pine blister rust*?

A. It is a disease that *kills* white pine trees.

Q. What causes *white pine blister rust*?

A. The growth of a parasitic fungus, a low form of plant life.



Blister rust canker on white pine. Blisters appear only during the spring.

Q. What plants are attacked by the fungus?

A. Currant and gooseberry bushes and white pine trees. White pines have their needles arranged in clusters of five. The fungus lives alternately on white pines and currant and gooseberry bushes.

Q. How is *white pine blister rust* spread?

A. The disease is spread by tiny, wind-borne spores ("seeds") produced by the fungus in the spring, summer, and autumn.



Q. Can *white pine blister rust* spread directly from pine to pine?

A. No.

Q. How, then, does the *white pine blister rust* fungus get from one pine to another?

A. During the spring dustlike spores, produced in blister rust cankers on white pines, are carried by the wind to the leaves of currant and gooseberry bushes, where a second, or alternate, stage of the fungus develops. The spores produced on the leaves of these bushes then infect white pines nearby.



Gooseberry bush and enlarged section of leaf showing pine-infecting stage of the disease.

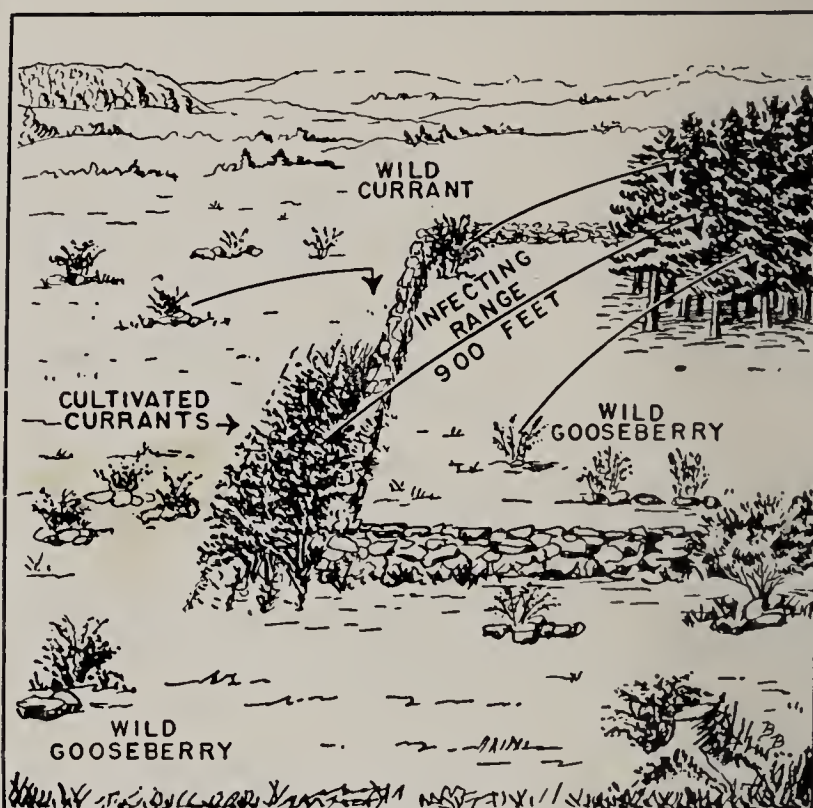
Q. How does blister rust kill white pine trees?

A. By destroying the bark, thus preventing the flow of food materials in the tree.

Q. Can *white pine blister rust* be controlled?

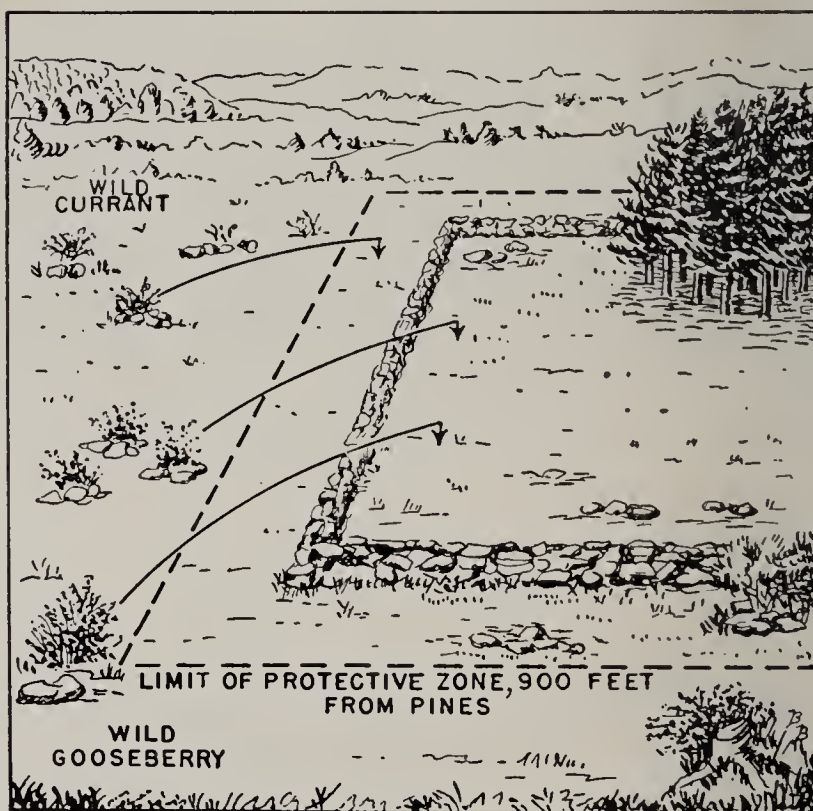
A. Yes. This disease can be controlled by destroying all wild and cultivated currant and gooseberry bushes growing within infecting distance of white pines. This distance varies, but seldom exceeds 900 feet.

How Blister Rust Attacks White Pines



White pines are infected by spores from currant and gooseberry bushes growing within 900 feet of the trees.

How White Pines Are Protected



The eradication of currant and gooseberry bushes within 900 feet protects the pines by removing the source of the spores.

For detailed information regarding blister rust and its control, WRITE TO YOUR STATE DEPARTMENT OF AGRICULTURE, FORESTRY, OR CONSERVATION, OR THE U. S. DEPARTMENT OF AGRICULTURE, WASHINGTON 25, D. C.



